

ORDER NO. **ARP2 6 4 3**

NI-J410

M - J510 AND M - J410 HAVE THE FOLLOWING:

Туре	Model		Power Requirement	Remarks
Турс	M – J510	M – J410	_ rower requirement	Kemarks
НВ	0	_	5	
HE	0		AC220V – 230V, 230V – 240V (switchable)*	
HEWZIW	0	_		
SD	0	0	AC110V, 120 – 127V, 220V, 240V (switchable)	
SL	0	0	AC110V, 120V, 220V, 240V (switchable)	

^{*} Change the connection of the power transformer's primary wiring.

- This manual is applicable to the following: M-J510/HB, HE, SD, SL and HEWZIW; M-J410/SD and SL.
- For the following: M J510/HE, SD, SL and HEWZIW; M J410/SD and SL, refer to page 19.
- These products are systems components. Each of these products does not function properly when independent; to avoid malfunctions, be sure to connect it to the prescribed system component(s), otherwise damage may result.

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1. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by " o" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Parts List

Mark	No.	Description	Parts No.	 Mark	No.	Description	Parts No.
NSP	1	Chassis (MTL)	ANA1194		31	HP assembly	AWZ4399
	2	Foot assembly	RXA1448		32	DISPLAY assembly	AWZ4420
	3	Foot assembly(S)	AMR1937		33	SWITCH assembly	AWZ4983
NSP	4	Chassis cover	ANG1627		34	Nylon rivet	AEP - 194
NSP	5	PCB Support	AEC1217	NSP	35	PIONEER badge	AAM1047
NSP	6	PCB Support	AEC1216		36	SP change SW	AAD2339
NSP	7	PCB Mold	AMR2115	NSP	37	Reinforced plate	ANG1635
NSP	8	PCB Support	AEC1006		38	Screw	BBZ30P080FZK
	9	PA assembly	AWZ4752		39	Screw	ABA1011
	10	MAIN SP assembly	AWZ4987		40	Screw	ABA1184
	11	REAR SP assembly	AWZ4421		41	Screw	BBZ30P060FZK
NSP	12	REAR Panel (MTL)	ANC1955		42	Screw	ABA1095
	13	Fan motor	AXM1013		43	Screw	BBZ26P080FMC
\triangle	14	AC cord stopper	AEC-882		44	Screw	PPZ50P100FZK
\triangle	15	AC power cord	ADG1067		45	Screw	ABA1054
	16	Connection cable	ADE1126		46	Screw	ABA1024
	17	Caution label	AAX1679		47	Screw	ABA1082
NSP	18	PCB Holder plate	ANG1609		48	Transistor (Q1, Q2)	MSC3281
	19	PRIMARY assembly	AWZ4415		49	Transistor (Q3, Q4)	MSA1302
	20		*******		50	Mica sheet	AEE1014
\triangle	21	FUSE (FU1, T2.5A)	AEK - 512	NSP	51	Heat sink	ANH1401
	22	Barrier	AEC1478		52	Bonnet	ANE1381
	23	Binder	AEP-215		53	PCB Holder plate	ANG1618
Δ	24	Power transformer (T1)	ATS1459		54	Screw	ABA1047
	25	TRANS assembly	AWZ4409		55	REAR AMP. assembly	AWZ4424
	26	Front panel (PLS)	AMB2048	\triangle	56	Voltage selector	AKX-507
	27	Sub panel (PLS)	AAP1325				
	28	Sheet (PLS)	AAK2368				
	29	FL panel	AAK2386				
	30	Power button	AAD2338				

M-J510

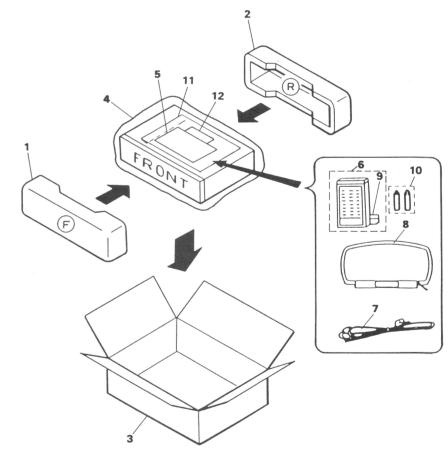
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Exploded views

NOTE: Screws adjacent to ▼ mark on product are used for disassembly.

Packing

Mark No. Description Mark No. Description Parts No. Parts No. 7 FM antenna 8 AM loop antenna assy 9 Battery cover NSP 10 Battery (R03, AAA) NSP 11 Literature bag Front pad
 Rear pad
 Packing case
 Packing sheet
 Operating instructions (English, French) ADH1005 AHA1545 ATB1006 AZN2237 AHA1546 AHD2490 AEX-021AHG1016 ARE1258 AHG-117NSP 12 Warranty card ARW-0886 Remote control unit (CU-MJ006) AXD1334



M-J510, M-J410 2 3 4 5

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2. SCHEMATIC DIAGRAMS R451-454 10:M-J510/HB,M-J510/HE,M-J510/SD,M-J510/SL, M-J410/SD AND M-J410/SL TYPES 100 : M - J510/ HEWZIW TYPE TO PRE-TUNER L451-454 ATHIO04:M-J510/HB, M-J510/HE, M-J510/SD, M-J510/SL, CONNECTION CABLE M-J410/SD AND M-J410/SL TYPES
ATHIOO9:M-J510/HEWZIW TYPE ADE II26 MSA1302 : M - J510/HB , M - J510/HE, M - J510/SD, MSC3281: M - J510/HB, M - J510/HE, M - J510/SD, M-J510/SL AND M-J510/HEWZIW TYPES 2SC3182N:M-J410/SD AND M-J410/SL TYPES M-J510/SL AND M-J510/HEWZIW TYPES 2SA1265N:M-J410/SD AND M-J410/SL TYPES AWZ4987: M-J510/HB, M-J510/SL AND M-J410/SL TYPES AWZ4570: M-J510/HE, M-J510/SD, AND M-J410/SD TYPES AWZ4571: M-J510/HEWZIW TYPE SPEAKER A ON/OFF SPAL C255 1000P Q1-Q4, Q201-Q218: POWEP AMP SP B GND SP A GND C205-208 47p: M-J510/HB, M-J510/HE, M-J510/SD, M-J510/SL, M-J410/SD AND M-J410/SL TYPES 150p: M-J510/HEWZIW TYPE SP B GND C211,212 4p/500 : M-J510/HB, M-J510/HE, M-J510/SD, M-J510/SL, M-J410/SD AND M-J410/SL TYPES 10p/500 : M-J510/HEWZIW TYPE M - J510/HEWZIW

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17/17 SP A GND 936 916 918 SPBR SPEAKER B ON/OFF SPA R Q301-Q305,Q313: OVERCURRENT DETECT CIRCUIT H.P ASSY AWZ4399: M-J510/HE, M-J510/HB, M-J510/SD, M-J510/SL, M-J410/SD AND M-J410/SL TYPES AWZ4986: M-J510/HEWZIW TYPE P.A ASSY J453 1/2W 10.0k WW R315 M-J510/HEWZIW TYPE ONLY C401 C402 1000P 1000P Q305,Q306,Q308,Q312,Q320: RELAY DRIVE D501-D506 AEL1122-A Q310, Q311: POWER OFF DETECTOR SS SS C611.612 10p:M-J510/HEWZIW TYPE 100p:OTHERS REAR AMP ASSY AWZ4424: M-J510/HE, M-J510/HB, M-J510/SD, M-J510/SL, M-J410/SD AND M-J410/SL TYPES AWZ4425: M-J510/HEWZIW TYPE 2 Q303, Q304, Q313: DC DETECTOR EXCEPT FOR M-J510/HB TYPE D501 - D506 : DISPLAY _ CENT.GND Q501:LED DRIVER SURROUND M-J510/HEWZIW P.A ASSY AWZ4420 TYPE ONLY AWZ4752:M-J510/HB TYPE AWZ4396:M-J510/HE, AND M-J510/SD TYPES AWZ4398:M-J510/HEWZ!W TYPE AWZ4753:M-J410/SD TYPE AWZ4999:M-J510/SL TYPE AWZ4994:M-J410/SL TYPE 10 :M-J510/HB, M-J510/HE, M-J510/SD, M-J510/SL, 0601,10602: REAR CENTER M-J410/SD AND 100:M-J510/HEWZIW TYPE :MAIN SIGNAL TO MAIN SP ASSY J453 M-J510/HEWZIW — — :CENTER SIGNAL TYPE ONLY ATH-133:M-J510/HB, M-J510/HE - - - - :REAR SIGNAL M-J510/SD, M-J510/SL, M-J410/SD AND C906 REGULATED POWER SUPPLY B Y101 F M-J410/SL TYPES ATH1009:M-J510/HEWZIW TYPE REAR SP ASSY : BBZ30P080FZK AWZ4421:M-J510/HE,M-J510/HB,M-J510/SD, M-J510/SL,M-J410/SD AND M-J410/SL TYPES AWZ4422:M-J510/HEWZ1W TYPE SWITCH ASSY AWZ4983 M GND 0.01/AC400 ACG1002 CD 18 AWZ4415:M-J510/HE,M-J510/HB AND
M-J510/HE,M-J510/B AND
M-J510/HE,M-J510/SD,M D5SB2OF 3 230 0 0 0 1 Y2 YELLOW EXCEPT FOR HE AND HEWZIW TYPES 22.5 D103
RBI52 3300/35 + C105 ZZZ 1880N75 15 AEK-512 Main1 FAN DRV. Y 1 BLUE 3300/35 + C106 77/ CP-N75 HEAT SINK BIS : BBZ30P080FZK 26 2200/35 ● ● Main1 - 22.5 C306 -26.5 ⊚ Main3 C101,102 ACH1137(6800): M-J510 SERIES S1 VOLTAGE SELECTOR S€ TRANS ASSY AKX-5/07 AWZ4409:M-J510/HE,M-J510/HB, M-J510/SD,M-J510/SL, M-J410/SD AND M-J410/SL TYPES AWZ4397:M-J510/HEWZIW TYPE 7 0 v 2 (A) 240V 8 0, 10---(B) 120-127V(120V for SL) AC POWER CORD | C| 110V | for SL) | | L1\ | AC POWER CORD | AC| 100 | SU | | AC| POWER CORD | AC| 100 | SU | AC| POWER CORD | AC| 100 | SU | AC| POWER SUPPLY | AC| 240V 50/60Hz + B TYPE | AC| 220V | AC| 230V 50/60Hz + B AND HEWZ | W TYPES | AC| 220-230V 50/60Hz + B AND HEWZ | W TYPES | AC| 10/120-127/220/240V 50/60Hz + SL TYPE | AC| 10/120-127/220/240V 50/120-127/220/240V 50/60Hz + SL TYPE | AC| 10/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/20/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50/120-127/220/240V 50 DI001-1005,201-208,213,214,217,218,301-307,951:HSS104-02 -J510/HE AND M-J510/SD, M-J510/SL -J510/HEWZIW TYPES M-J410/SD AND M-J410/SL TYPES TI POWER TRANSFORMER Note: 3. RESISTORS: (Type 1) 5. COILS: 7. OTHERS: Unit: $k:k\Omega$, $M:M\Omega$, or Ω unless otherwise noted. ATS1459: M-J510/HE, M-J510/HB AND M-J510/HEWZIW TYPES Unit: m:mH or µH unless otherwise noted. → : Signal route. ⊘ : Adjusting point. 1. When ordering service parts, be sure to refer to ATSI461: M-J510/SD AND M-J510/SL TYPES ATSI462: M-J410/SD AND M-J410/SL TYPES Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise 6. VOLTAGE AND CURRENT: "PARTS LIST of EXPLODED VIEWS" or "PCB V : Signal voltage at rated output. • ▼ (Red) : Measurement point. PARTS LIST". Tolerance: (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ or $\pm 5\%$ un- The
 \(\text{mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when re-: DC voltage (V) at no input signal unless otherwise noted. Value in () is DC voltage at rated power. 8. SWITCHES (Underline indicates switch position): less otherwise noted. 2. Since these are basic circuits, some parts of them or the placing, be sure to use parts of identical designation. 4. CAPACITORS: ⇔ mA or ← mA: DC current at no input signal unless otherwise H.P ASSY SWITCH ASSY values of some components may be changed for improve-Unit: p:pF or µF unless otherwise noted. noted. S401: SPEAKER S851: MAIN SW Ratings: capacitor (µF)/ voltage (V) unless otherwise noted. A, B ON/OFF SW Rated voltage: 50V except for electrolytic capacitors.

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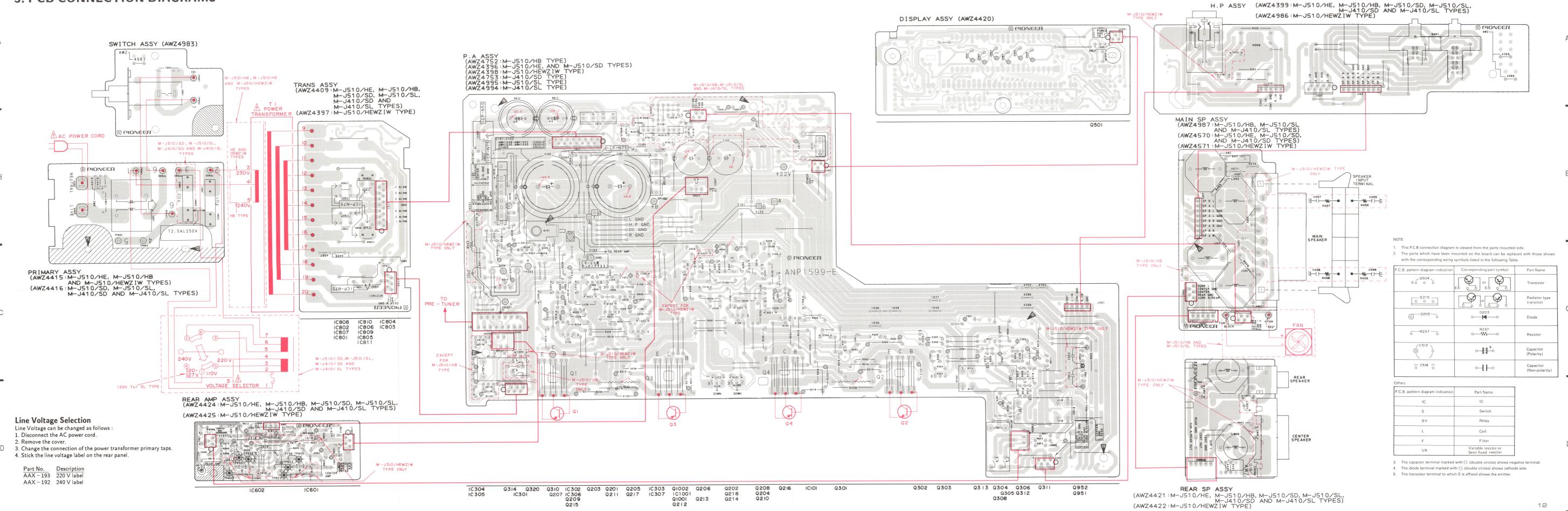
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3. PCB CONNECTION DIAGRAMS



4. PCB PARTS LIST

NOTES:

• Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

The
 \(\Lambda \) mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

• Parts marked by "@" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

Mark No. Description	Parts No.	Mark No. Description	Parts No.
LIST OF ASSEMBLIES		PRIMARY ASSY	
• H.P ASSY	AWZ4399		
TRANS ASSY	AWZ4409	COILS, FILTERS	
SWITCH ASSY	AWZ4983	⚠ L801	ATF1006
PRIMARY ASSY	AWZ4415	-	
DISPLAY ASSY	AWZ4420	CAPACITORS	
		\triangle C801 (0.01/AC400V)	ACG1002
REAR SP ASSY	AWZ4421		
REAR AMP ASSY	AWZ4424		
MAIN SP ASSY	AWZ4987	DISPLAY ASSY	
P.A ASSY	AWZ4752		
		SEMICONDUCTORS	
		Q501	RN1203
LD ACCV		D501 - D506	AEL1122
I.P ASSY			
WITCHES		DEAD OD ACCV	
S401	ASG1049	REAR SP ASSY	
		COILS, FILTERS	
ESISTORS		L901,L903	ATH-133
R401-R404	RS2LMF681J	L901,L903	A1H-133
THERE		RESISTORS	
OTHERS HEADBHONE LACK	A T/3/1 000	R901,R903	RD1/4PMFL100J
HEADPHONE JACK	AKN1022	•	
		OTHERS	
TRANS ASSY		PIN JACK(2P)	AKB1126
KANS ASSI		CN901 SPEAKER TERMINAL 2-P	AKE1041
EMICONDUCTORS			
IC801-IC811	ICP-N75	REAR AMP ASSY	
		REAR AMP ASST	
		SEMICONDUCTORS	
SWITCH ASSY		IC601,IC602	SI - 18751
		10001,10002	51 10/01
WITCHES		CAPACITORS	
∆ S851	ASG1025	C611,C612	CCCSL101J50
		C609,C610	CEHAQ100M50
CAPACITORS		C603,C604	CEHAQ220M50
\triangle C851 (0.01/AC400V)	ACG1003	C601,C602	CEHAQ2R2M50
		C605 - C608	CFTXA394J50
		C613,C614	CQMA122J50
		DESISTORS	
		RESISTORS	DD1/0D351007
		R609,R610	RD1/2PM100J
		Other Resistors	$RD1/8PM\square\square J$

Mark No. Description	Parts No.	Mark No. Description	Parts No.
MAIN SP ASSY		C223,C224	CEAS101M10
MAIN SI ASSI		C1001	CEAS101M25
COULS FILTERS		C103,C104	CEAS222M35
COILS, FILTERS	A (T) I 1 0 0 4	C105,C106	CEAS332M35
L451 – L454	ATH1004	C303	CEAS471M6
RESISTORS		C107	CEAS4R7M50
R451-R454	RD1/4PMFL100J	C360,C361	CEASR47M50
		C311	CEHAQ101M50
OTHERS		C213,C214	CEXA470M50
TH1001 THERMISTOR SPEAKER TERMINAL 8-P	NTH2218F AKE-111	C201,C202	CEYA4R7M50
SI DARDIT I DIUMINAD 0 1	ARE III	C305 – C308	CFTXA823J50
		C217,C218	CKCYB102K50
P.A ASSY		C209,C210	CKCYB681K50
		C203,C210	CQMA102J50
SEMICONDUCTORS		C111	CQMXA473J100
IC301-IC307	ICP-N75	OIII	OQMAA400100
IC1001	M5223L		
IC1001	NJM78M12FAS	RESISTORS	
	2SA1048		A CN1007
Q305 Q209,Q210	2SA1048 2SA1145	R245,R246 (0.33/5W)	ACN1087
Q209,Q210	25A1145	R315,R316	RD1/2PM100J
0017 0019	00 4 1200	R215,R216	RD1/4PM102J
Q217,Q218	2SA1306	R320	RD1/4PM103J
Q201-Q204,Q207,Q208	2SA992	R225,R226	RD1/4PM471J
Q306	2SC1845	Dode Dodo	DD4 (4D3 5000 7
Q205,Q206,Q301,Q302,Q308	2SC2240	R217,R218	RD1/4PM623J
Q303,Q304,Q320,Q951,Q952,	2SC2458	R233-R236	RD1/4PMFL101J
Q1002		R209,R210,R213,R214	RFA1/4PS391J
0010 0014	0000000	R227-R232	RFA1/4PS470J
Q213,Q214	2SC2603	R239-R242	RFA1/4PS4R7J
Q211,Q212	2SC2705	Discour	David / (DG) con D
Q215,Q216	2SC3298	R1007	RN1/4PC1001F
Q314	2SD1913	R1013	RN1/4PC1202F
Q311,Q312	RN1201	R1011	RN1/4PC5101F
0010	DN1000	R1012	RN1/4PC3301F
Q310	RN1203	R342	RS2LMF332J
Q313	RN2203	D.00	D.Gort V.Grood V
Q1001	XDC143ES	R337	RS2LMF391J
D101	D5SB20F	R341	RS2LMF560J
D201 – D208, D213, D214, D217, D218,	HSS104-02	R954,R956	RS2LMFR22J
D301-D307,D951,D1004,D1005		Other Resistors	RD1/8PM□□□J
D317	HZ20EB	OTHERS	
D211,D212,D215,D216	HZ4.7EB	CN201 CONNECTOR(15P)	KPE15
D102,D103	RB152	CN204 CONNECTOR(3P)	KPE3
D308	RD24ESB	CN202 CONNECTOR(4P)	KPE4
D315,D1006	RD5.1ESB	SCREW	BBZ30P080FZK
D316	S5566		
RELAYS			
RY301,RY302	ASR-112		
RY1001	ASR-112 ASR1035		
	,		
CAPACITORS	A CITI 1 1 0 7		
C101,C102 (6800/63V)	ACH1137		
C211,C212	CCCSL040C500		
C215,C216	CCCSL080D500		
C219 – C222	CCCSL221K500		
C206,C208	CCCSL470J50		
C205,C207	CCPUSL470J50		
C301,C302	CEANP010M50		
C312	CEANP2R2M100		
C109	CEAS010M50		
C304,C951	CEAS100M50		

5. FOR M-J510/HE, SD, SL AND HEWZIW; M-J410/SD AND SL

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "@" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

5.1 CONTRAST OF MISCELLANEOUS PARTS FOR M-J510/HE, SD, SL AND HEWZIW

M-J510/HE, SD, SL, HEWZIW and HB have the same construction except for the following:

Mark		Part No.					
	Symbol & Description	HB type	HE type	SD type	SL type	HEWZIW type	Remarks
	H.P assembly	AWZ4399	AWZ4399	AWZ4399	AWZ4399	AWZ4986	
	P.A assembly	AWZ4752	AWZ4396	AWZ4399 AWZ4396	AWZ4995	AWZ4398	
	PRIMARY assembly	AWZ4415	AWZ4415	AWZ4416	AWZ4416	AWZ4415	
	TRANS assembly	AWZ4409	AWZ4409	AWZ4410 AWZ4409	AWZ4409	AWZ4397	
	REAR SP assembly	AWZ4421	AWZ4421	AWZ4421	AWZ4421	AWZ4422	
	DEAD AMD 11	A 33777 4 40 4	A 3377 4 40 4	A 3377 4 40 4	A 3377 4 40 4	A 33777 A 405	
	REAR AMP assembly	AWZ4424	AWZ4424	AWZ4424	AWZ4424	AWZ4425	
	MAIN SP assembly	AWZ4987	AWZ4570	AWZ4570	AWZ4987	AWZ4571	
Λ	AC power cord	ADG1067	ADG1068	ADG1133	ADG1068	ADG1068	
Λ	Voltage selector			AKX - 507	AKX-507		
Λ	T1 power transformer	ATS1459	ATS1459			ATS1459	
1	T1 power transformer		***********	ATS1461	ATS1461	***************************************	
	Fan motor	AXM1013			AXM1013		
NSP	Heat sink	ANH1401	ANH1324	ANH1324	ANH1401	ANH1324	
NSP	Rear panel (MTL)	ANC1955	ANC1956	ANC1958	ANC2058	ANC1957	
	Screw	PPZ50P100FZK			PPZ50P100FZK		
	FM antenna	ADH1005	ADH1005	ADH1005	ADH1005	ADH1002	
	Remote control unit (CU – MJ006)	AXD1334	AXD1334			AXD1334	
	Remote control unit (CU – MJ008)			AXD1335	AXD1335		See Page 24.
	Packing case	AHD2490	AHD2490	AHD2491	AHD2526	AHD2490	
	Battery cover	AZN2237	AZN2237			AZN2237	
	Operating instructions (English, French)	ARE1258	ARE1258	ARE1258	ARE1258		
	Operating instructions (German, Italian)		ARC1385			ARC1385	
	Operating instructions (Dutch, Swedish,		ARC1387			*************	
	Spanish, Portuguese)						

H.P ASSEMBLY AWZ4986 and AWZ4399 have the same construction except for the following:

Mark	Sumbal & Dagarintian	Part	Remarks	
	Symbol & Description	AWZ4399	AWZ4986	Remarks
	C401, C402		CKDYB102K50	

P.A ASSEMBLY AWZ4396, AWZ4395 and AWZ4752 have the same construction except for the following:

Mark	Cumbal & Daraninai		Part	No.		D
	Symbol & Description	AWZ4752	AWZ4396	AWZ4398	AWZ4995	Remarks
	TC101	NIMPOIOTAC			NIMZOLOGIAC	
	IC101	NJM7812FAS			NJM7812FAS	
	IC1001	M5223L			M5223L	
	Q1001	XDC143ES			XDC143ES	
	Q1002	2SC2458			2SC2458	
	Q1101		2SC2458	2SC2458	2SC2458	
	Q1102		2SC1845	2SC1845	2SC1845	
	D1004, D1005	HSS104-02			HSS104-02	
	D1006	RD5.1ESB			RD5.1ESB	
	D1101		HZ18EB	HZ18EB	HZ18EB	
	D1102, D1103		HSS104-02	HSS104-02	HSS104-02	
	RY1101		ASR1035	ASR1035	ASR1035	
	C107	CEAS4R7M50			CEAS4R7M50	
	C109	CEAS010M50			CEAS010M50	
	C203, C204	CQMA102J50	CQMA102J50		CQMA102J50	
	C205, C207	CCPUSL470J50	CCPUSL470J50	CCDSL151J50	CCPUSL470J50	
	C206, C208	CCCSL470J50	CCCSL470J50	CCDSL151J50	CCCSL470J50	
	C211, C212	CCCSL040C500	CCCSL040C500	CCCSL100D500	CCCSL040C500	
	C253			CKDYX104M25		
	C254			CKDYB102K50		
	C255			CKDYB103K50		
	C952, C953	•••••		CKDYB472K50		
	R253			RD1/8PM100J		
	R1007	RN1/4PC1001F			RN1/4PC1001F	
	R1008	RD1/8PM221J			RD1/8PM221J	
	R1009	RD1/8PM224J			RD1/8PM224J	
	R1010	RD1/8PM562J			RD1/8PM562J	
	R1011	RN1/4PC5101F			RN1/4PC5101F	
	R1012	RN1/4PC3301F			RN1/4PC3301F	
	R1013	RN1/4PC1202F			RN1/4PC1202F	
	R1014	RD1/8PM222J			RD1/8PM222J	
	R1015	RD1/8PM182J			RD1/8PM182J	
	R1101		RD1/8PM102J	RD1/8PM102J	RD1/8PM102J	
	R1102		RD1/8PM563J	RD1/8PM563J	RD1/8PM563J	
	R1103, R1104	**********	RD1/8PM103J	RD1/8PM103J	RD1/8PM103J	

PRIMARY ASSEMBLY

Althogh AWZ4416 and AWZ4415 are different in part number, they consist of the same components.

TRANS ASSEMBLY

Althogh AWZ4397 and AWZ4409 are different in part number, they consist of the same components.

REAR SP ASSEMBLY

AWZ4422 and AWZ4421 have the same construction except for the following:

	Calala Danistia	Part	Remarks	
Mark	Symbol & Description	AWZ4421	AWZ4422	Remarks
	L901, L903	ATH-133	ATH1009	
	C901, C905 C904, C906		CKDYB103K50 CKDYB681K50	
	R901, R903	RD1/4PMFL100J	RD1/4PMFL101J	

REAR AMP ASSEMBLY

AWZ4425 and AWZ4424 have the same construction except for the following:

Mark	C. I.I.O. Description	Par	Remarks	
	Symbol & Description	AWZ4424	AWZ4425	Nemarks
	C611, C612 C615, C616 C617, C618 C619, C620	CCCSL101J50	CCCCH100D50 CQMXA473J100 CKDYB102K50 CCDSL101J50	

MAIN SP ASSEMBLY

AWZ4570, AWZ4571 and AWZ4987 have the same construction except for the following:

Manda	Sumbal & Description		Remarks		
Mark	Symbol & Description	AWZ4987	AWZ4570	AWZ4571	Remarks
	L451—L454	ATH1004	ATH1004	ATH1009	
	C451 — C454 C455 — C458			CQMXA103J100 CCDSL680J50	
	R451—R454 R455—R458	RD1/4PMFL100J	RD1/4PMFL100J	RD1/4PMFL101J RD1/8PM100J	
	TH1001	NTH2218F			

5.2 CONTRAST OF MISCELLANEOUS PARTS FOR M-J410/SD AND SL

M-J410/SD, SL and M-J510/HB have the same construction except for the following:

Mark	Complete Description		Part No.				
IVIark	Symbol & Description	M-J510/HB	M – J410/SD	M-J410/SL	Remarks		
	PRIMARY assembly MAIN SP assembly P.A assembly	AWZ4415 AWZ4987 AWZ4752	AWZ4416 AWZ4570 AWZ4753	AWZ4416 AWZ4987 AWZ4994			
$\stackrel{lack}{\Delta}$	Q1, Q2 Transistor Q3, Q4 Transistor AC power cord Voltage selector	MSC3281 MSA1302 ADG1067	2SC3182N 2SA1265N ADG1133 AKX — 507	2SC3182N 2SA1265N ADG1068 AKX - 507			
<u>^</u>	T1 power transformer T1 power transformer FU2 Fuse (T2.5A/250V)	ATS1459	ATS1462 AEK — 512	ATS1462 AEK — 512	For PRIMARY assembly		
NSP NSP NSP NSP	Fan motor Heat sink Front panel(PLS) Rear panel (MTL) Reinforced plate	AXM1013 ANH1401 AMB2048 ANC1955 ANG1635	ANH1324 AMB2047 ANC1959	AXM1013 ANH1401 AMB2047 ANC2057			
	Screw	PPZ50P100FZK		PPZ50P100FZK			
	Remote control unit (CU-MJ006) Remote control unit (CU-MJ007) Packing case	AXD1334 AHD2490	AXD1333 AHD2489	AXD1333 AHD2525			

PRIMARY ASSEMBLY

Althogh AWZ4416 and AWZ4415 are different in part number, they consist of the same components.

MAIN SP ASSEMBLY

AWZ4570 and AWZ4987 have the same construction except for the following:

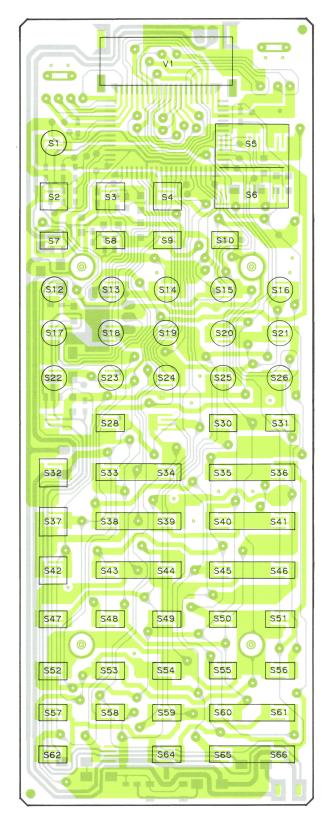
Mark	Symbol & Description	Part	D 1	
		AWZ4987	AWZ4570	Remarks
	TH1001	NTH2218F		

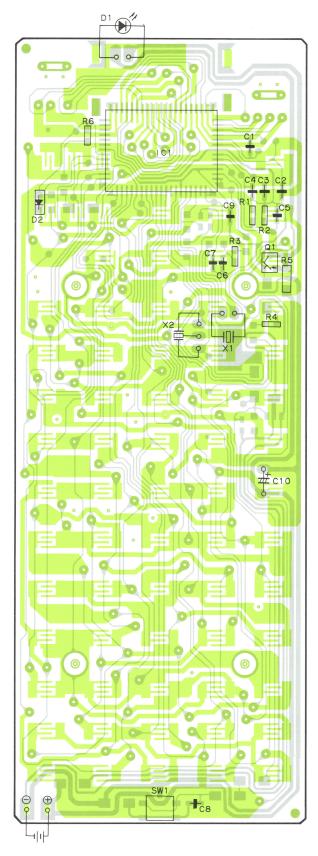
P.A ASSEMBLY AWZ4753, AWZ4994 and AWZ4752 have the same construction except for the following:

	Combal & Dagginting		Damasulas		
Mark	Symbol & Description	AWZ4752	AWZ4753	AWZ4994	Remarks
	IC101	NJM7812FAS		NJM7812FAS	
	IC1001	M5223L		M5223L	
	Q1001	XDC143ES		XDC143ES	
	Q1002	2SC2458		2SC2458	
	Q1101		2SC2458	2SC2458	
	Q1102		2SC1845	2SC1845	
	D1004, D1005	HSS104-02		HSS104-02	
	D1006	RD5.1ESB		RD5.1ESB	
	D1101		HZ18EB	HZ18EB	
	D1102, D1103		HSS104-02	HSS104-02	
	RY1101		ASR1035	ASR1035	
	C101, C102	ACH1137	ACH1211	ACH1211	
	C107	CEAS4R7M50		CEAS4R7M50	
	C109	CEAS010M50		CEAS010M50	
	R1007	RN1/4PC1001F		RN1/4PC1001F	
	R1008	RD1/8PM221J		RD1/8PM221J	
	R1009	RD1/8PM224J		RD1/8PM224J	
	R1010	RD1/8PM562J		RD1/8PM562J	
	R1011	RN1/4PC5101F		RN1/4PC5101F	
	R1012	RN1/4PC3301F		RN1/4PC3301F	
	R1013	RN1/4PC1202F		RN1/4PC1202F	
	R1014	RD1/8PM222J		RD1/8PM222J	
	R1015	RD1/8PM182J		RD1/8PM182J	
	R1101		RD1/8PM102J	RD1/8PM102J	
	R1102		RD1/8PM563J	RD1/8PM563J	
	R1103, R1104		RD1/8PM103J	RD1/8PM103J	

5.3 Remote control unit for M - J 510/SD and SL types [AXD1335(CU - MJ008)]

PCB

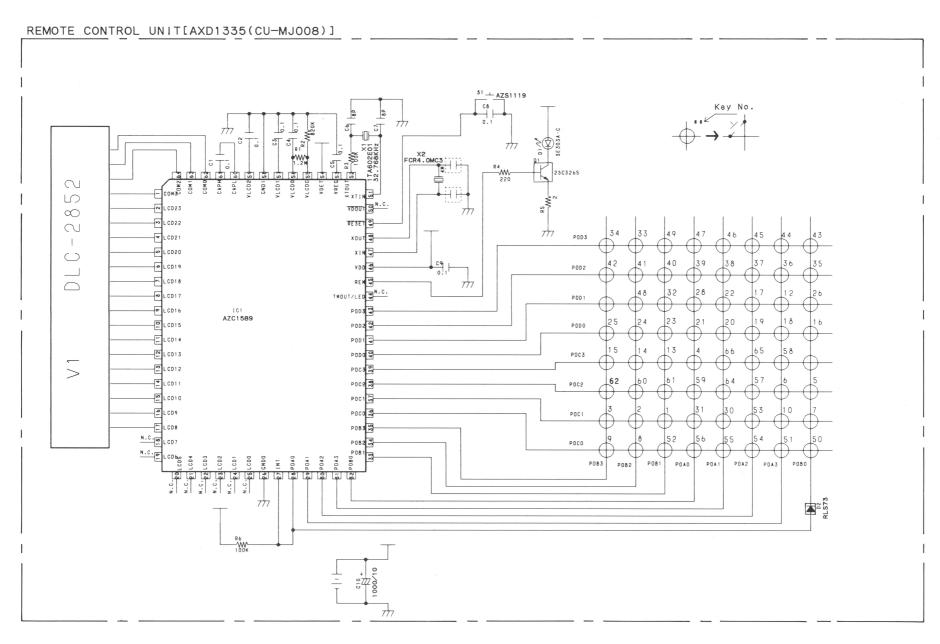




: chip transistor



: chip diode



Note:

(Type 2)

- When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".
- Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.
- 3. RESISTORS:

Unit: $k:k\Omega$, $M:M\Omega$, or Ω unless otherwise noted.

Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.

Tolerance: (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ or $\pm 5\%$ unless otherwise noted.

4. CAPACITORS:

Unit: p:pF or µF unless otherwise noted.

Ratings: capacitor (μF)/ voltage (V) unless otherwise noted. Rated voltage: 50V except for electrolytic capacitors.

5. COILS:

Unit: m:mH or µH unless otherwise noted.

6. VOLTAGE AND CURRENT:

: DC voltage (V) at no input signal unless otherwise noted.

⇔ mA or ← mA: DC current at no input signal unless otherwise noted.

7. OTHERS:

- → : Signal route.
- Ø : Adjusting point.
- ▼ (Red) : Measurement point.
- The

 mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
- 8. SWITCHES (Underline indicates switch position):

```
TAPE I /
S1:
      SYSTEM POWER
                                S 39:
                                       ∢II/∢
S 2 :
      VOLUME+
                                S 40:
S 3:
      FUNC
                                S 41:
                                       II▶/▶
                                       TV/VTR/■/DIA/CX
      DIRECT FUNC.
                                S 42:
S 4:
                                       TAPE II / ₩ / REPEAT-A
      P.BASS
                                S 43:
S.5:
                                       TAPE I / REPEAT-B
S 6:
      VOLUME-
                                S 44 :
                                       RANDOM/◀
S 7:
      CD/LD -
                                S 45:
S8:
               CONTROL
                                S 46:
                                       RANDOM ∕ ▶
               MODE
                                S 47:
S 9:
      VTR
      SYSTEM -
                                S 48:
S 10:
                                       \bigcirc
                                S 49 -
S 12 ·
      PGM/BAND
                                       EDIT
S 13:
                                S 50:
S 14:
                                S 51:
S 15:
                                S 52:
                                       EFFECT
S 16:
                                S 53
                                       GEQ
      MPX
                                S 54:
                                       FLAT
S 17:
                                       SOUD IOG-
                                S 55 ·
S 18:
      5
S 19:
                                S 56:
                                       SOUD JOG+
S 20:
                                S 57:
                                       SFC MODE
S 21:
                                S 58:
                                       DOLBY MODE
                                       CENTER MODE
S 22:
      SCAN
                                S 59:
                                       SENTER LEVEL -
S 23:
      9
                                S 60:
S 24:
      10/0
                                S 61:
                                       SENTER LEVEL+
S 25:
      10/+10
                                S 62:
                                       SLEEP
      12/CLEAR, CHP/TM
                                S 64:
                                       TEST TONE
S 26:
S 28:
      DISPLAY
                                S 65:
                                       _ REAR LEVEL
      TV. POWER
S 30 :
                                S 66:
S 31:
      TV, FUNC
S 32:
S 33:
      CHANNEL - / H
S 34:
      CHANNEL+
      TV VOLUME - / II CD / LD
S 35:
      TV VOLUME+/▶
S 36 ·
```

PCB PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

S 37:

S 38 :

POWER /

TAPE I /€

- Parts marked by " " " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.
 - Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
SEMICONDU	JCTORS		RESISTORS		
IC1		AZC1589	R5		RD1/4PM020J
Q1	Chip Transistor	2SC3265			,
D1	$\stackrel{\cdot}{ ext{LED}}$	SE303A-C		Other Resistors	$RD1/8PM\square\square J$
D2	Chip Diode	RLS73			,
	-		OTHERS		
SWITCH			V1	LCD	DLC - 2852
	MT Switch (RESET)	AZS1119	X1	(32.768KHz)	1TA602E01
	,		X2	(4MHz)	FCR4.0MC3
CAPACITOR	.s			,	
C1-5		CKCYX104M25			
C6, 7		CCCSL080D50			
C8, 9		CKCYX104M25			
C10		CEAS102M10			

(M-J510/SD and SL types) EXPLODED VIEWS AND PARTS LIST

NOTES:

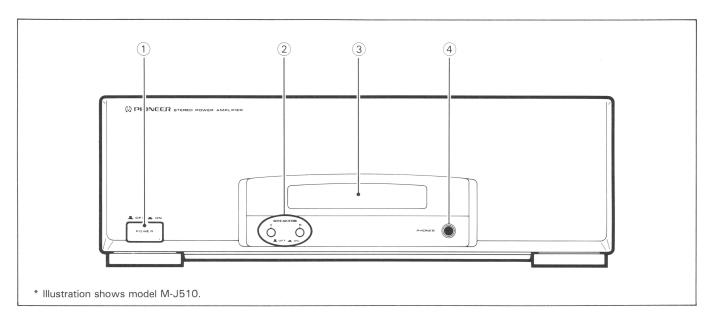
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

rk N	o. Descriptio	n	Parts No	•			
4	Case(A) Case(B) Battery c Filter Name pla		AZN223 AZN223 AZN223 AZA135 AZA143	9 7 5	5		
SP (Rubber si 7 P.W.B 8 Terminal 9 Terminal 0 Spring	A	AZA143 AZW113 AZB133 AZB133 AZB133	39 2 3	É		
13 14	1 LCD cove 2 Connecto 3 Screw 4 MT Swite 5 Spacer	r	AZA135 AZK112 AZB133 AZS1119 AZN210	3 5 9	1		
10	6 Spacer		AZN218	1			4 S
*					10		11
							The state of the s
					6		
						1	12
					7		
					14 8	' // / '	
					2		
							13

3

6. PANEL FACILITIES

FRONT PANEL FACILITIES



STEREO POWER AMPLIFIER M-J310/M-J410/ M-J510

1) POWER ON/OFF switch

This is the switch for electric power. When the power is ON, the power indicator ③ lights.

Leave this power switch ON. To turn the system on and off, use tuner control amplifier's power switch.

2 SPEAKERS buttons (M-J410, M-J510 only)

Speakers connected to the rear panel SPEAKERS A, B terminals can be switched ON/OFF independently.

NOTE

When the speaker system is connected to only one speaker terminal (A or B) and both A and B buttons are ON, there will be no sound. Turn ON only the selector to which the speaker system is connected.

3 Power indicator

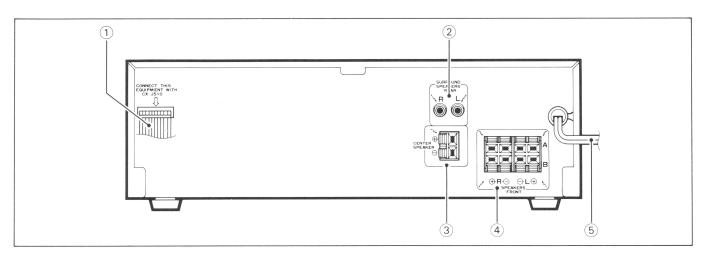
4 PHONES jack

For stereo headphones.

NOTE:

There is no output from the speakers when headphones are plugged into PHONES jack.

REAR PANEL FACILITIES



STEREO POWER AMPLIFIER M-J310/M-J410/ M-J510

- * Illustration shows model M-J510.
- 1) Tuner control amplifier system cable

Connect to the POWER AMP jack of the tuner control amplifier.

(2) SURROUND SPEAKERS jacks

Connect to the Surround speaker systems.

NOTE:

Connect a speaker system having a nominal impedance of 16 Ω or more.

③ CENTER SPEAKER terminal (M-J510, M-J410 Multivoltage model only)

Connect to the center speaker.

NOTE:

Connect a speaker system having a nominal impedance ranging from 8 Ω to 16 Ω or more.

4 SPEAKERS terminals

Power Supply/Miscellaneous

- A: Connect to a first set of speakers.
- B: Connect to a second set of speakers. With M-J410 and M-J510 UK/ European models multi-room (subroom) speakers can be connected. The M-J310 features only one set of speaker terminals.

VOTE:

Connect a speaker system having a nominal impedance ranging from 8 Ω to 16 Ω .

5 Power cord

Connect to the tuner control amplifier's AC OUTLETS.

7. SPECIFICATIONS

$\label{eq:continuous_power_output} \begin{tabular}{ll} \hline \mbox{Continuous Power Output (DIN)} \\ \mbox{U.K., European models 40 W + 40 W (1 kHz, T.H.D 1 %, 8 Ω)} \\ \mbox{Continuous Power Output (RMS)} \\ \mbox{Multivoltage model 50 W + 50 W (1 kHz, T.H.D 5 %, 8 Ω)} \\ \mbox{Total Harmonic Distortion (1 kHz, 20 W, 8 Ω) 0.1 %**} \\ \end{tabular}$
[M-J410]
Continuous Power Output (DIN)
U.K., European models 80 W + 80 W (1 kHz, T.H.D 1 %, 8 Ω)
Continuous Power Output (RMS)
Multivoltage model Front
Rear
Center
Total Harmonic Distortion
U.K., European models (1 kHz, 40 W, 8 Ω) 0.1 % * *
Multivoltage model (1 kHz, 35 W, 8 Ω) 0.1 % * *
[M-J510]
Continuous Power Output (DIN)
U.K., European models
Front 80 W + 80 W (1 kHz, T.H.D 1 %, 8 Ω)
Rear
Center
Continuous Power Output (RMS)
Multivoltage model
Front
Center
Total Harmonic Distortion (1 kHz, 40 W, 8 Ω)
Total Harmonic Distortion (1 Kitz, 40 W, 6 W, 11 Kitz)

Power Supply/Miscellaneous
Power requirements
U.K. model a.c. 240 Volts ~ , 50/60 Hz
European model a.c. 220 — 230 Volts~, 50/60 Hz
Multivoltage model AC 110 V/120 - 127 V/220 V/240 V
(switchable), 50/60 Hz
Power consumption
M-J310 180 W
M-J410
U.K., European models
Multivoltage model 320 W
M-J510 380 W
Dimensions
M-J310 360 (W) x 340 (D) x 121 (H) mm
M-J410, M-J510
Weight
M-J310 6.3 kg
M-J410 7.4 kg
M-J510 7.7 kg
Accessories
Operating instructions
Remote control unit
Dry cell batteries "AAA" (IEC R03/UM-4)
FM T-type Antenna
AM Loop Antenna
** Measured By Audio Spectrum Analyzer.